# Practical Test Reference Guide [Report]

## Used Technologies for Image Carousel Component by DeepMed

- Node.js 18.16.0
- Express js
- React 5.0.1
- MongoDB Atlas Cloud Database
- Visual Studio Code

#### Libraries and Dependencies

#### Mongoose for MongoDB: for connect MongoDB with Node.js

**Used Connection Codes:** 

```
const mongoose = require('mongoose');
mongoose.connect('mongodb://127.0.0.1:3600/api/carousel);
const Slide = mongoose.model(Slide, { name: String });
const image1 = new Cat({ name: 'Mountain_Image' });
image1.save().then(() => console.log('Image Displayed'));
```

**Dotenv for env**: for load environmental variables for process

Installation

```
npm install dotenv --save
```

**Axios**: for handling transformations of requests and responses of data by HTTP requests

Installation:

```
$ npm install axios
```

Use:

```
import axios, {slides, AxiosError} from 'axios';
export default Slides
```

**Nodemon:** for automatically restarting the node application when file changes

```
npm install -g nodemon
```

#### Steps:

- 1. Create node package using 'git init'
- 2. Installed express using 'npm install express'
- 3. Installed nodemon, axios as dependencies
- 4. Made express request in 'index.js' as server
- 5. Installed react using 'npx create-react-app carousel' in Carousel directory
- 6. Pass images for slides in 'data.js' for client side from backend using json.
- 7. Connect MongoDB with mongoose using connectivity driver URI.
- 8. Fetch Images slides data using 'import "data" from "data.js" ' in app.js
- 9. Created styles and transforms in 'index.css' in src file.

#### References:

#### 1. Learn React

React useState Hook (w3schools.com)

React Props (w3schools.com)

React useReducer Hook (w3schools.com)

https://www.w3schools.com/react/react\_router.asp

#### 2. How to Make a GET Request with axio

https://www.freecodecamp.org/news/how-to-use-axios-with-react/

#### 3. Fetching data with React hooks and Axios

https://dev.to/darkmavis1980/fetching-data-with-react-hooks-and-axios-114h

## 4. MongoDB

https://cloud.mongodb.com/v2/647c4c9a208c0b5f68c86a1d#/metrics/replicaSet/647c4d5f8810fd7b858c26f8/explorer/deepmed\_carousel

## 5. MongoDB Cloud driver installation

https://www.mongodb.com/docs/drivers/node/current/#introduction

## 6. Make Reusable Components in React

https://blog.bitsrc.io/reusable-components-in-react-a-practical-guide-ec15a81a4d71

## 7. Make Fetch API

https://www.c-sharpcorner.com/article/how-to-fetch-api-call-using-json-server-in-reactjs/